THE CLINIQUE.

VOL. XI.] CHICAGO, NOVEMBER 15, 1890. [No. 11.

Original Lectures.

PSEUDO-HYPERTROPHIC PARALYSIS.

A CLINICAL LECTURE DELIVERED IN THE HAHNEMANN HOSPITAL OF CHICAGO, OCTOBER 27, 1890, BY H. B. FELLOWS, M. D., CLINICAL PROFESSOR OF NERVOUS DISEASES.*

This case is brought from Iowa to this clinic for diagnosis and advice.

Case No. 15,389. Earl D., age 8 years, 6 months. The father gives the following account of the child: Weight at birth, 12 pounds; apparently strong and healthy. Fontanelles closed at two years of age. When six months old the child had an attack of pneumonia, from which he recovered nicely. A second attack, a year later, left him with a weakness in the back. When four-and-a-half years old he was run over by a carriage, the wheel passing over the left foot. So far as was observed at the time no injury was sustained, with the exception of a few contusions about the head and face and left foot. Previous to that time there was a tottering gait which, after the accident, grew worse. When first noticed the peculiarity seemed to be a spreading of the feet. During this time an eruption had developed on the foot and anterior tibial region of the left leg. At present there is a spot on the back of the wrist, the size of a quarter of a dollar, similar to the former eruption.

*Reported from the notes of Mr. O. S. Smith and Miss E. Irène Knowlton.

The first eruption was cured by the application of the sulphate of zinc. When the child reached the age of seven years and ten months he had, successively, scarlatina,

FIG. 1.

measles and chicken pox. Since then there has been a second appearance of the first eruption. Previous to these

affections his gait had gradually grown worse, and immediately succeeding them he was unable to walk at all for a short time, and ever since his recovery from these acute attacks he has been gradually growing worse.

The child being stripped, an examination reveals the following conditions: When standing, the shoulders are markedly thrown backward, and the pelvis as markedly projected forward, producing a decided lordosis (Fig. 1). This position of the spine is exactly reversed when he is seated. In rising from a sitting posture he is obliged to lift himself by his hands. The gastrocnemius on each leg is much enlarged, tense and firm, and there is some swelling of the vastus internus. The thigh, on the whole, is much wasted. The pectoralis muscles, especially in their lower parts, are atrophied. The deltoid muscles are not much altered. The infra-spinati are enlarged. There is wasting of the teres. The sterno-cleido-mastoid seems thin in its lower part. The biceps are nearly or quite normal, though the whole upper arm appears emaciated. The latissimus dorsi and the serratus are undergoing atrophy. The enlarged muscles are abnormally hard. The masseter and temporal muscles look very full and as if partaking of the pseudo-hypertrophy. The lower lip drops and he keeps his mouth open. This, the father says, is a late symptom. It is a peculiar symptom in this class of cases. The child is inclined to stand on his toes, the heels being somewhat elevated. The gait is peculiar, being a combination of waddling and rolling motion, the weight being thrown and the body balanced, first on one leg, and then on the other. There have been no other cases of this kind in the family, either on the side of the father or mother, so far as the father is aware. The grandfather and the great-grandfather, on the mother's side, died of paralysis, the particulars of which cases we have, however, been unable to learn.

The boy, having been requested to lie on the floor, is required to rise without taking hold of any support, and his manner of rising marks one of the peculiar features of the

case (Fig. 2). First getting on his hands and toes, the legs being spread widely apart and braced, he gradually works

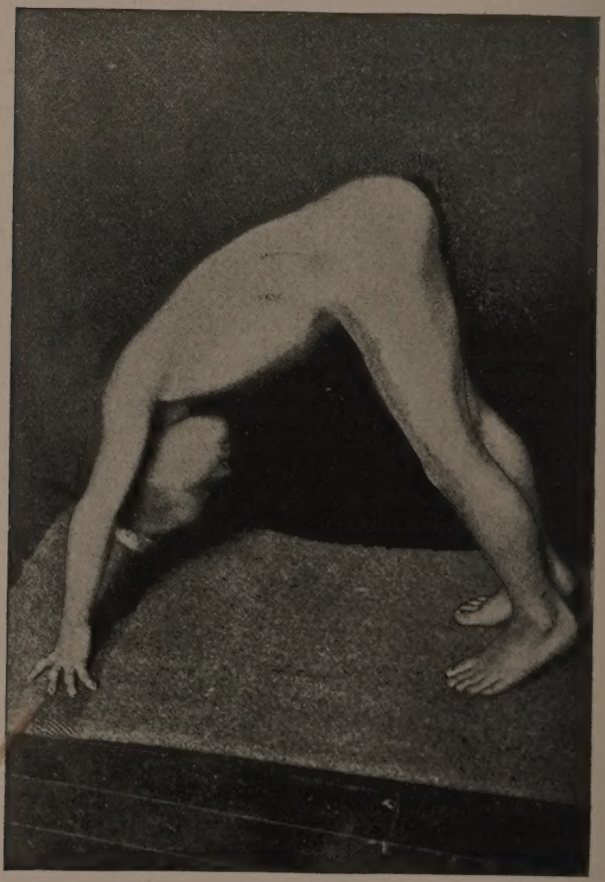

FIG. 2.

his feet up as near as possible to his hands, the hands supporting the anterior part of the body; then, with a peculiar

swinging motion of the arm, he raises one hand to the knee, the knee being slightly bent at the time, and clasps the knee with the hand. He then, with a swinging motion of the other arm, gains what spring he can, and raises that hand to clasp its corresponding knee; then he raises his hands, step by step climbing up his thighs, until the erect position is again assumed.

Taking all these symptoms into consideration we must make the diagnosis of pseudo-hypertrophic paralysis.

The most essential points leading up to this diagnosis are the enlargement and induration of the gastrocnemii and the infra-spinati, the atrophy of other muscles, the condition of the lordosis, the peculiar gait, the method of rising from a lying posture, the order and slowness of development of the disease, and the age of the patient.

The history of the case will distinguish it from the atrophy following acute poliomyelitis. In that disease the attack is sudden, the paralysis attaining its maxium in a few hours or at least a few days, the atrophy following in a few weeks and being strictly localized; also, it is not preceeded by the peculiar straddling gait first present in this case; and the atrophy is never accompanied by this pseudo-hypertrophy, and the paralysis is regressive. In this case the atrophy has come on very slowly, has been accompanied in a part of the muscles by the pseudo-hypertrophic process, and has pursued a progressive course, attacking the muscles in a certain order, different, in this respect, from the atrophy that would follow an attack of acute poliomyelitis.

In simple idiopathic atrophy there is also a different history. The wasting begins in the lips and gradually works down, the power of the legs being unimpaired when the shoulders are greatly wasted, a condition never seen in a typical case of pseudo-hypertrophic paralysis. Both diseases affect several members of the same family often, but pseudo-hypertrophic paralysis may occur in isolated instances, as in this case, and when hereditary usually passes down on the mother's side of the family. Pseudo-

hypertrophic paralysis is distinguished from spastic paraplegia of childhood by the lack of all spasmodic symptoms. In the spastic paraplegia the knee-jerk is exaggerated, and often ankle clonus is present, while in this disease the knee jerk is lost, except perhaps in the earlier stages, and there is no ankle clonus. The contracture of the gastrocnemii is not in the nature of spasmodic action but is due to the increase of the connective and fatty tissue in the muscle and the waste of the muscular fibres.

The diffculty of distinguishing pseudo-hypertrophic paralysis from commencing cerebral or cerebellar disease in well developed children, who are unsteady on their legs and easily fall, may at times be considerable, but they are nevertheless distinguishable by the peculiarities of the gait, the marked lordosis, and the manner of rising after a fall.

The manner of rising is not wholly peculiar to this disease, but other diseases marked by it, owing to the weakening of the extensors of the leg, do not occur frequently among children, but this disease nearly always developing before puberty, gives to this symptom a high diagnostic value.

Chronic muscular atrophy of spinal origin is a disease of adult life, though cases have occurred as early in life as fourteen years. Even when the age does not furnish a criterion by which to judge of the case, other symptoms already mentioned will solve the problem. Enlargement of the calf has been observed early in such cases of pseudo hypertrophic paralysis as showed late development of the weakness. Nothing of this would occur in the former disease.

If we were to examine these enlarged muscles under the microscope a marked increase of fat cells would be found, so great an increase as to make some parts in the field of the microscope to appear like a section of a fatty tumor. But further examination will reveal tracts of nucleated fibrous tissues, and also muscular fibres. These muscular fibres may be as broad as normal, but are generally narrowed, and in some instances so degenerated as to only leave their sheath. The striation is generally preserved,

though the striæ may be further apart than in the healthy fiber. In muscles that still retain some red tint the amount of fat is less with a relatively large amount of interstitial fibrous tissue. The enlargement of the muscle is largely due to the fat, the muscular tissues undergoing atrophy at the same time. In some muscles the atrophy, even from superficial observation is very evident. The motor nerves of the muscles have not in any case been found affected.

Where does this diseased action originate, in the spinal cord or in the tissues making up the muscle? Authorities do not agree on this point, but the weight of authority is against the spinal theory, and that it is a primary disease of the muscles in which there is an overgrowth of the interstitial connective tissue, in which fat may or may not be deposited. The wasting of the muscular fibres appears to be secondary to this disease process. The condition of the sensory nerves which terminates in the connective tissue has unfortunately in no case been observed.

In some cases the spinal cord has been found to be diseased; in others it has been found perfectly normal. Gowers and Lockhart Clark reported a case in which at the last dorsal segment there was an area of granular disintegration in the intermediate gray substance on each side, in front of the posterior vesicular tract. The large cells in the anterior horns, which preside over the nutrition of the muscular fibres, were just as sharply defined and normal as in health. In the spinal forms of muscular atrophy these cells are always affected or destroyed. The condition of the cord when this has been found diseased may have been either secondary, or a mere complication.

It appears then most reasonable that there is a congenital tendency in the interstitial connective tissue of the muscles to proliferate, with or without a deposit of fat, and that this is the essential basic element of this disease. This is made the more probable from a tumor found on the conus medularis, a microscopical section of which is figured by Gowers, which shows the same elements and arrangment

that is found in the muscles under-going pseudo-hypertrophy. In this case some embryonal element from which muscular tissue is developed must have got displaced, resulting in this peculiar growth. It would seem probable that the same morbid tendency, the same malnutrition seen in this growth may also affect the muscular tissue.

The drooping of the lower lip, not usual in the disease, and which the father says is a late development, would show that the muscles about the mouth were becoming affected, notwithstanding I can see no other outward sign of atrophy.

The prognosis in this case so far as a cure is concerned is not favorable. The disease is progressive, but patients seldom die directly of it, complications, especially of lung disease, carrying them off. Owing to the difficulty of clearing the lungs of the discharges in the bronchial tubes when the chest muscles are weakened the irritation even of a slight cold may run into a fatal broncho-pneumonia, which will terminate the life of the patient. It behoves the parents of this lad, therefore, to keep him from taking cold, and to see that the treatment of such attacks, even though they seem slight, be not neglected. He ought to be clothed in woolen at all times.

You will observe a tendency to contraction of the muscles of the leg that will produce talipes equinus, and which will in time render him unable to walk. When these cases are put upon their back, they are likely to progress faster, and therefore he should be kept using his muscles as well as possible, and as long. If the talipes becomes so marked as to stop his walking it will be well to have the tendons divided. Gymnastics, especially in the form of massage and passive movements, will be of advantage in slowing the progress of the disease. The faradic current is also one of the means worth trying.

Medicines will probably avail but little directly against the disease. Plumbum, arsenicum and phosphorus have some relation to such conditions, and the latter two have been thought to retard the progress of the disease. But

when the general health and complicating diseases have been looked after, about all that medicine can do has been accomplished.

Puberty will be a critical time for this lad, for the disease at that time shows a disposition to advance rapidly, and hurry on to the fatal conditions; some cases, however, reach adult age.

THE TREATMENT OF UTERINE FIBROID TUMORS BY GALVANISM.*

BY E. STILLMAN BAILEY, M. D., PROF. OF THE MEDICAL DISEASES OF WOMEN IN HAHNEMANN MEDICAL COLLEGE AND HOSPITAL, CHICAGO.

In the transactions of the Tenth International Medical Congress recently held in Berlin, it appears that in the Sections of Obstetrics and Gynecology, August 8th and 9th, a considerable portion of the time was given to the discussion of the treatment of fibroid tumors of the uterus by galvanism. The full report will be a valuable contribution to the literature of the subject.

The correspondents report that Drs. Apostoli, Gautier, (Paris), Zwiefel, (Leipsic), Geobanoff, (Moscow), Broese, (Berlin), Cutler and McGinni, (New York), Engelman, (St. Louis), defended the treatment and reported numerous cases and the proportion of successful results.

Danjon, (Paris), argued against the treatment.

I present for your consideration a few interesting cases and the results of the treatment as they stand to-day.

Mr. Keith is credited with having said that one of the essential factors in the treatment of fibroids is the ability to make an accurate diagnosis. In the cases submitted doubts are eliminated by the very ready manner in which these cases could be recognized. Relief in chronic cases is a boon that need not be denied the patient. Midway between the non-success of medicine and the surgeon's knife comes the use of galvanism in certain cases. I wish to call your attention to the following as having something of special interest;

---

*A Clinical Lecture delivered Nov. 8, 1890.

Case 1.—In the January number of the current volume of the CLINIQUE, I reported in detail a case of "Intramural Fibroid Tumor of the Uterus," (page 7) symptomatically cured. This patient—October 2—bids me add to my record of her case the following words: "The tumor of the uterus has diminished perceptibly in size and gives me no inconvenience save if I happen to be on my feet a good long time. I have had only one sick spell during the year past—a new experience to me—and only once have I had to go to my bed because of pain during the menstrual week. Formerly I was confined to my bed during the entire week. I am very free from the headaches that I used to have. If they do come they are very much lighter, and do not last as long. I feel that I have a new lease of life, and have been relieved of my very great danger and awful suffering."

One year afterward she knows to a certainty that she is in better health. The tumor is smaller, and that galvanism in her case was to her a greater gift than the ten years of medication. She was ready for a radical surgical operation two years ago, but there is now no need. She remains symptomatically cured.

Case 2. Intramural Fibroid of the Uterus. Mrs. ——, recommended for treatment by D. S. Smith, M. D. June 26, 1890. Widow, age 43 years. Began treatment the following clinical history having been given me. In 1873, seventeen years ago, the patient had a severe attack of peritonitis, and a fibroid tumor of the uterus, intra-mural, was found some little time after this illness. This tumor has continued to grow for sixteen and more years. Its proportions are large, resting of late within the pelvic fossa, upon the pubic and innominate bones and presenting anteriorly like a gravid uterus at the fifth month. In its early growth Prof. H. Marion Sims recognized it as a fibroid of such size and held by such adhesions that operative interference was to be avoided. This patient has therefore gone all these years with only such treatment as would relieve the immediate symptoms.

Present condition is one of *great suffering from tension and painful pressure and a hæmorrhagic discharge, which has lasted almost constantly for a year.* These discharges produced great debility. Micturition is very frequent, especially at night, preventing sleep. The patient is unable to walk, sit or ride for any considerable length of time, and the constant changing to keep in comfortable position, is very tiresome.

The treatments by galvanism extended over a period of time dating from June 26, 1890, to Oct. 20th, and numbered twenty-nine in all, all negative intra-uterine treatments. The current was made to vary from one hundred and sixty to two hundred and twenty milliamperes, length of sittings about eight minutes each.

This patient on leaving the city sends me the following letter which I copy:

"Am made very comfortable and greatly benefited by the treatment. I now suffer very little inconvience as compared to what I have for years. The great fullness and tension has entirely gone, the numbness and threatening paralysis of the left side has also disappeared. A most severe pain in the arm and especially in the thumb which has been a constant torture has left me. The annoying urinary symptoms have disappeared so that I now sleep splendidly, the best for years. The size of the tumor seems to have materially decreased and its position is more comfortable. The hemorrhages have almost entirely stopped. I have had only one menstrual period which was the most natural for years and one return of that everlasting flowing. This time it was not copious and lasted eight days."

In this case even if a suspicion of the climacteric enters into the clinical history the relief of this patient, it is evident from the foregoing that the treatments have been very prompt and fortunate and serviceable in ameliorating these symptoms, viz.: The flowing ceased immediately after the treatment was commenced, and has not returned as before.

The painful tension was also relieved. She suffered less from the growth even if it may not have materially changed in size, but the symptoms have disappeared.

Micturition has been made more natural and the sleep improved.

Case 3. Intramural Fibroid of the Uterus. Age 31. I submit the following case of intra-mural uterine fibroid as having especial value as a record of sensations due to treatment, the patient being a lady physician and having a very extensive practice. She has studied every work in English on fibromata and is thoroughly conversant with the literature pertaining thereto. The report I copy verbatum, simply supplying the methods of the use of the galvanism.

"I first noticed the abnormal growth in the uterus in August, 1887. It has gradually increased until now, June, 1890, it reaches, just before the menstrual period, as high as the umbilicus. I am fully satisfied from the symptoms that the growth is an intra-mural fibroid. The menstrual flow is preceptibly increased. Three or four times during each menstrual period, there are very severe uterine contractions, so severe that I cannot refrain from an outcry of pain and no matter where I may be, must "double up" until it passes off. There is constant pressure upon the bladder making frequent urination imperative.

For the past six months or more I have been very uncomfortable from a feeling of internal tension, as if the growth were a sack or bladder filled to its utmost capacity, and on the point of bursting. This feeling of tension is at times almost unbearable, especially just prior to menstruation. Mentally I am despondent and depressed, and disinclined to enter upon any new or aggressive work. This is entirely unlike myself. I tire very easily and prefer riding to walking, although jumping from my carriage hurts me. I am wretched and discouraged, knowing what all this is leading to. I am at a point where I must take some form of treatment.

June 22, 1890. After becoming theoretically conversant with Dr. Apostoli's method of treatment of fibroids I applied to Dr. Bailey for the administration of galvanism. The first treatment was very mild, but produced quite severe uterine contractions, which continued more or less severe for six or eight hours. Turning over on the couch aggravates the contractions and pain. The treatment was followed by an unusually free flow of urine, with perfect relief of the pre-existing irritability of the bladder.

June 23. Treatment, 90 milliamperes. Martin's intra-uterine platinum electrode—smallest size. Abdominal electrode covering abdomen, spongiopilin, with block-tin back, negative intra-uterine cauterization, continued for five minutes. This treatment was followed by the same immediate effects as from the first treatment—uterine contractions, aching in the uterus, groins and sacrum, and in the crural nerves, to the knees, lasting three-quarters of an hour. *Am free from the tension, the first time for months.*

June 24. Treatment, 125 milliamperes, electro-negative pole, intra-uterine cauterization for five minutes. The same immediate symptoms. The tension which returned last evening is again entirely relieved by this treatment.

Menses appeared this date, were normal in every respect. Only two contractions and they were less severe than usual.

June 30. Treatment, 100 milliamperes, electro-negative pole, intra-uterine, for six minutes. The galvanism produced severe uterine contractions. I had distinct sensation of the formation and escape of bubbles of gas along the intra-uterine electrode—two or three each minute.

July 2. Treatment, 150 milliamperes, electro-negative pole, intra-uterine, for six minutes. No abnormal sensations save the passing of gas bubbles. The tumor certainly feels softer.

July 3. Treatment, 160 milliamperes six minutes, same polarity. Can feel distinctly the current as it passes from one electrode to the other. It produces a severe aching in the uterus. Gas bubbles distinctively felt. Great discomfort follows this treatment—pain in the back, lumbar and sacral regions, severe and continuous. Bowels distended with gas. Lassitude and faintness. Pulse 56 to 60. Sharp, lancinating pains above the heart for several hours after this treatment. Trembling of the limbs from slight exertion. A congested feeling in the pelvis as before menstruation.

July 5th. Treatment 100 milliamperes for four minutes, same placing of poles. This treatment relieves the bad symptoms.

July 7th. Treatment 150 milliamperes. Continued six minutes, same arrangement of poles. The current is particularly distinct at the internal electrode. A constant aching and severe contractions. Gas bubbles form and pass with unusual distinctness.

July 9th. Treatment 200 milliamperes for six minutes. Same poles as before. The diminution of the growth is very perceptible. I can now lean forward when sitting without feeling the pressure of the tumor. General health perfect. Despondency gone. No inconvenience from this treatment.

July 12th. Treatment 150 milliamperes. Continued five minutes. Same arrangement of poles. The growth seems more dense and hard for several hours after each treatment.

July 13th. Treatment same as day before. The tumor is quite sore and painful after this treatment. Pinching pains through it all night disturbing sleep.

July 14th. Treatment, short and light treatment today, 100 milliamperes, three minutes. Same symptoms

relieved. Weight and pressure still annoying with the pinching pains.

July 16th. Same treatment. Suffered much discomfort from pressure. Severe pains in the uterus. Cannot stand without discomfort. Severe headache.

July 18th. Treatment, 100 milliamperes for five minutes.

July 19. Menstruation relieved all of the uncomfortable symptoms. Only one slight uterine contraction during this period. The flow for two days was normal and for two days was watery and profuse.

July 25th. Treatment, 120 milliamperes for five minutes. Same poles.

July 28. Treatment, 150 milliamperes for five minutes.

July 30. Treatment, same as above. I find nothing to note in particular respecting this week's treatment, save that there has been a constant watery and purulent discharge since the last period.

October 9, 1890. Menstruation has occurred regularly since the last treatment every twenty-eight days. Those painful contractions seem things of the past. They have not been severe since the first treatment, and for the past four periods have not occurred at all. The purulent discharge is now constant, requiring the use of three napkins in twenty-four hours. The discharge is offensive and at times is excoriating.

This patient will return for a second series of treatments. The diagnosis in this case was made by three different physicians in different cities. The most faithful attention to medical treatment has been observed by the patient. The first relief she had in two years came from the galvanism. She will give to the profession the results of this treatment in a careful report when she knows she is well.

Case 4.—A sloughing sub-mucous fibroid.—Mrs. ——, age sixty-three, recommended for treatment by Dr. C. E. Laning; menopause at 57 years. Patient had always had excellent health. June 16, 1890, patient came to me with the following history: Eighteen months before she noticed that there was some abnormal growth connected with the uterus, and this was accompanied with a hemorrhage which had been almost constant for fifteen months. For the past

three months the flow was of a very bad odor and very profuse.

She was obliged to keep her bed for two or three hours each day; was scarcely able to sit, owing to increased pain in sacrum, and she was so very weak, that to walk more than a block she could not without great exertion. There was a great sense of weight and a constant pain in the back. Patient was anæmic and was drifting downward very rapidly. Her clothes, owing to the increase in size of the abdomen, were painfully tight. Sleep was broken and valueless. Examination revealed the presence of a submucous, soft fibroid occupying the upper segment of the uterus. Its upper border was just beneath the umbilicus. The size of the growth as outlined, was large as my two hands doubled up closely together. Its density was very soft and yielding. The discharge was very profuse and was of a muddy red color, mixed with small clots of blood and shreds of débris of membranes and was simply stinking; no large pieces were ever passed. The pressure of the tumor was backward and made her life very miserable from the constant pain in the lumbar region.

I will not detail the treatment as in the other cases but copy from my note-book as follows:

Given in all twenty-two treatments. I gave the intra-uterine negative pole, which in this case worked excellent results toward diminishing the flow, current was given—never less than 100 and not to exceed 190 milliamperes—length of treatment six minutes each.

July 6. After eleven treatments, the patient says, "Yesterday I took a long walk and felt no inconvenience from it—did not have to lie down upon returning home. The discharge is very much less. I no longer feel any of that aching in the back that was so constant for over a year."

July 8. "Am feeling better than at any time during the year past. My clothes again fit me. If anything they are too loose."

July 11. "Yesterday I felt as though something in the uterus suddenly gave way and I suffered from a very profuse watery discharge for twelve hours. There was no special odor. The quantity of discharge was almost alarming." This seemed to be a terminal discharge.

July 17. My note book says, Patient goes home to-day. She tells me to write this: "I do not have any cause to complain now. The swelling has certainly gone. My sleep is good. I feel stronger and better in every way. In

fact, I am no longer inconvenienced in any way from this tumor, and I am sure that I do not feel different from what I would if I were entirely well."

The discharge is still present but is not profuse nor troublesome.

Sept. 29. This patient comes for examination as per my request upon leaving off the galvanic treatment two months ago. The examination found the womb normal in depth and scarcely a trace of any of the symptoms or conditions noted when patient began the treatments. She reports herself as well.

Oct. 28. There is nothing to add to this case, now five months nearly since the treatment was commenced. The patient still insists that she is well.

CARBO ANIMALIS IN ACUTE NASAL CATARRH.—Dr. Robert T. Cooper of the London Homeopathic Hospital writes to the *Monthly Hom. Review:* Some months ago I was suffering from cold in the head, with its usual accompaniment, blocked nostrils, necessitating the continual use of those insanitary necessities, pocket handkerchiefs, a state of things as commonly met with as it is disagreeable. To relieve the nostrils I used a trituration of *lobelia cerul.*, and then one of *carbo vegetab.*, and without the least effect. It was a case for pocket handkerchiefs, which, in a progressive age like this, means humiliating failure and opposition to all modern scientific teaching. A bunged nose is bad enough, but a feeling of scientific incompetence in the presence of trivial and every-day ailment is even far worse. In this extremity it was a happy thought that induced me to sniff up a few grains of *carbo animalis*, which cleared the nasal conduits effectually. This action of *carbo anim.* is a most important one; it is no little gain to be able to dispense with pocket handkerchiefs in colds of the head, and this in an easy, simple and effectual manner.

Since this I have used the *carbo an.* in many cases connected with my aural specialty, and am very pleased with its action; it relieves a symptom that gives a great deal of trouble in the treatment of catarrhal deafness. Why *carbo animalis* should have this effect, and why *carbo veg.* should not, I am unable to explain: the fact is there, and it is for others to refute or confirm it; but of one thing I must insist, that the preparation be genuine and made as Hahnemann directs. I have good reason for thinking that much of the *carbo anim.* of the shops is not made in accordance with rule.

Clinical Society Transactions.

HOWARD N. LYON, M. D., SECRETARY.

OCTOBER MEETING, 1890.

The regular monthly meeting of this Society was held on Saturday evening, October 25, in the parlors of the Grand Pacific Hotel. Owing to a very severe storm, only about fifty physicians and students were present. The hour was spent in hearing and discussing

THE REPORT OF THE BUREAU OF CLINICAL MEDICINE.

W. J. HAWKES, M. D., CHAIRMAN.

AFFECTIONS OF THE HEART.—BY DR. W. J. HAWKES.—It is not my intention to give an exhaustive dissertation upon heart disease. Current medical literature and the text-books so fully and variedly do this, that, even were it not out of place on an occasion like this, would make it at least superfluous. I desire simply to briefly give the results of my own thoughts and observation in practice.

That ailments of the heart are on the increase there seems but little question. To "heart-failure," and more definite pathological conditions of that organ, more sudden deaths have been ascribed during especially the past two years than ever before during a similar period of time.

Much of the increase in the number of such cases is attributed, and with truth, to the influence of *la grippe*, which disease seemed to be especially severe on those who had any considerable tendency to heart weakness, or heart irritability. But this does not account for the whole of the apparent increase in fatalities from affections of the heart in some of their varied forms.

According to my observation it is true of this as it is of all other diseases which become chronic, and which have a

fatal termination, that the family history for generations past shows in some form a decided diathesis, such as cancer, consumption, rheumatism, gout, paralysis, syphilis, insanity, etc., etc. Of these, rheumatism, gout, phthisis and syphilis, seem to form the predisposing cause more frequently than others.

The diathesis having rheumatism or gout for its favorite family form of demonstration, is most frequently found in subjects of organic valvular disease of the heart. A syphilitic history is most often found in those obscure heart neuroses where the brain and spinal nerve centres, as the origin of the pneumogastric, are the seats of the lesion. This class of cases show on cardiac examination no evidences of organic change in the heart; only evidences of functional disturbances reward the most careful and accurate physical examination. Often, indeed, cases which have been in turn pronounced gastralgia, cardialgia, carditis, dyspepsia, etc., have on post-mortem proved to be a central lesion of the vagus.

The task of arresting the fatal work of this alarming affection devolves equally upon the "Science of Therapeutics" on the one hand, directed chiefly toward minimizing the inherited predisposing causes; and upon hygiene and preventive medicine on the other hand, directed against the exciting causes. Of these latter I believe

THE ABUSE OF TOBACCO

to be one of the chief. If it is not already, it is surely fast becoming the principal of the many exciting causes of the rapidly increasing frequency of heart diseases. Its influence is cumulative, and, like other pathological nerve irritants, is transmitted to succeeding generations. So that the present experiences the evil effects of the tobacco abuse of the past.

The "tobacco pulse" and the "tobacco heart" are recognized and well-known pathological phenomena in the medical literature and practice of to-day. But it is only in contemporaneous literature we find such conditions dis-

cussed. It is a recognized pathological condition of this generation only.

The pathological action of tobacco is directly upon the nerves governing the heart, lungs and stomach. The experience and evidence of all who have attempted to acquire the tobacco habit is that, next to the deathly nausea, the most constant and distressing symptom experienced by the novice is a very uncomfortable feeling about the heart, with greatly increased rapidity of its pulsations. All of which point to central irritation of the pneumogastric.*

Persistence in the effort to acquire the habit results in its accomplishment finally, without the above mentioned distressing effects. Nature has accommodated herself to the inevitable. Fortunately for the devotees and victims of of high life, she is a great conservator of health and very accommodating, and always endeavors, no matter how heavily handicapped, to perform her varied functions in as near the intended way as possible. But the fact that the poison is tolerated with decreasing signs of distress, is not evidence that it has ceased to injure. Every quidd and every cigar and cigarette hurts and irritates those same nerve centres and produces more or less evident functional disturbance of the organs supplied from them. But it is a well-established pathological fact that nerve irritation indefinitely protracted eventually results or may result in organic change. Therefore protracted smoking may and will produce organic heart disease.

* From the observations of Dr. Emirzé, of Smyrna, it appears that the disorders of the air passages and the lungs were numerous and severe. Of 100 smokers aged from twenty-five to thirty-five, 23 had emphysema, 18 chronic bronchitis and 26 pharyngeal catarrh. Of 100 smokers of from thirty-six to forty years old, there was pronounced emphysema and chronic bronchitis in 14, tachycardia in 1 and trigeminal paralysis in 1. Of 60 other subjects who had smoked for from fifteen to seventeen years, 4 had bronchiectasis and 5 hypertrophy of the heart with valvular lesions. They all smoked the narghilé, a Turkish pipe the flexible tube of which runs through water, and the effects of smoking which are almost identical with those resulting from the use of cigars and cigarettes.

THE CURE

Of all such cases must be commenced by the removal of the cause. The weed must be given up altogether and *at once*. Many physicians and *all* tobacco users advocate a gradual lessening of the daily quantity used. They say that the loss of its influence all at once will be too great a strain for their nerves to bear. This is wrong and a mistake. I have no respect for a man who cannot at once totally give up the use of tobacco when he desires to do so from the conviction that its continuance will be very serious and probably fatal to him. The craving for tobacco is not at all comparable to the craving of the drunkard for alcohol. If one has resolved to use no more tobacco under any circumstances he is not continually under temptation to go beyond his allowance, as is he who uses a certain limited amount each day. The way, and the only way, to stop is to stop—to reverse Horace Greely's advice.

The best medicinal antidotes to the effects of tobacco are *ignatia, nux vomica, digitalis, lilium tigrinum.*

Probably the next in importance as an exciting cause of heart trouble is

INDIGESTION.

The intimate nerve relation between the heart and stomach through the pneumogastric is too well-known to all students of medicine to warrant repetition here. It is through this intimate reflex relationship that disturbances of the stomach from indigestion may become so large a factor in the incitement of functional heart affections especially. I am safe in saying that fully one-half of those who consult me in the belief that they are the victims of heart disease, are suffering from symptoms primarily and chiefly caused by dyspepsia, and that when the digestive apparatus is set right the "heart disease" is cured.

While these are comforting facts to us and gratifying results to our patients, they should direct our earnest attention to the almost universal evil, dyspepsia. Its influence and bearing on the pathological condition under discussion

are direct and important. The reflex effect of a dyspepsia-irritated and gas-distended stomach upon an irritable or weak heart are too well known to be disputed, and too important to be ignored. Continual reflex irritation not less than direct functional disturbance of an organ, if sufficiently protracted, can as surely result in organic change. Several generations, more or less, of the nerve irritation of hereditary and constitutional disease, finally results in the chronic morbid changes formerly enumerated. Long continued reflex irritation may also produce similar morbid conditions, even though when such irritation began there was in the individual no predisposing tendency. The same is true of our drug proving. Shallow writers claim that a medicine cannot be homœopathic to a disease or cure it unless the drug has caused such a condition, as for example, scarlatina. The truth being that the drug as administered in proving does produce the nervous phenomena observed in the disease, and were the drug to be continued indefinitely, it would in time produce the organic changes observed in the patient as a result of continued disease irritation.

While it is computed that nine of every ten males use tobacco in some form, it may be said with equal truth that nine hundred and ninety-nine of every thousand adult persons in civilized life suffer to a greater or less degree from indigestion. The causes of this are too many, various and important for discussion here. The facts exist, and to my mind they go far toward accounting for the great increase in heart complaints and fatalities.

Case 1. I can recall one case in particular which illustrates the proposition. It was the case of an elderly gentleman who had been given up to die by a half-dozen prominent allopathic physicians, who pronounced his case one of dropsy, asthma and dyspnœa, resulting from disease of the heart.

I found the patient gasping for breath, unable to lie down, and had been so unable totally during the ten days preceding. He had not slept in the recumbent position during a period of three months. His limbs and body to

his waist were dropsical to an extreme degree. His digestive organs had almost entirely ceased to work, the tongue being heavily coated and the stomach revolting against food. Notwithstanding this, by the physicians' orders he was being forced to take milk or other hearty food every two hours.

His heart gave every evidence of the utmost disturbance, without unmistakable signs of valvular defect. It was impossible to arrive at an accurate diagnosis in that regard.

My diagnosis was that, next to the doctors, the digestive organs were the chief offenders; that the heart was only functionally affected, and that the proper name for the condition was *dyspepsia*. Prognosis favorable.

Acting upon these conclusions, orders were given to discontinue all food and drink excepting "cambric tea," which consists of hot water which has been boiled, with as much milk or cream as one would use in tea or coffee, with a few grains of salt added. A teacupfull of this to be taken —always *hot*—every two hours. This diet was strictly adhered to for a week, and until the tongue had become cleansed.

Nux vomica, and *arsenicum*, were, as the symptoms called for either, given. At the end of the first week the patient was sleeping from four to six hours, without waking, each night, his dropsy had disappeared in the urine, enormous quantities of which were passed during the third and fourth days. Strange as it may seem to those physicians who insist on the stupid practice of forcing for a considerable period food upon an unwilling stomach, the patient steadily gained strength during the week while taking no other nourishment than hot water; so that in ten days he was able to be down stairs and out on the sidewalk. At the end of three weeks from the time I first saw him he was attending to business as usual, and has now been well for more than a year. All indications of heart disease disappeared and return only when he commits some indiscretion in diet.

Case 2. Another case which is now under treatment, a young girl of twenty years. The history of the symptoms was that she had first a pain of a cramping character in the region of the articulation of the left lower jaw, which prevented her at times from closing the mouth, and which apparently caused a depression at that point. Her mother rubbed the region with her hand and whiskey, which caused the pain to leave that spot, and, as she expressed

it, "go to the stomach and then to the region of the heart." At the heart it caused great distress and anxiety. This frightened the mother, and she allowed the pain to select its own location, and sent for me.

Careful physical examination could discover no sign of organic or valvular lesion in the heart. But the tongue was heavily furred, and gas would literally roll in volumes from her mouth with a loud noise at short intervals. This escape of gas always relieved her immediately for a short time. The pain about the heart had been continual from the first. Every noise, even the voice of her brother speaking suddenly, caused her to jump and start painfully, and to make the heart beat rapidly and tumultuously. These symptoms, together with great weakness and inability to hold her head erect, pain at the base of the brain, and a bad family history, caused me to make a diagnosis of central nerve lesion as the prime cause, with dyspepsia as the exciting cause.

Argentum nitricum was given with most flattering results. The cambric tea diet was ordered during forty-eight hours, at the end of which time toast, baked sweet apples and more milk and water were allowed. A week of this treatment brought her to a condition when she considered herself well enough to eat fried eggs, raw celery and bananas at one meal. All the old chain of symptoms returned. She is now doing penance on cambric tea and *nux vomica.*

The medicinal remedies which have been most frequently called for in my practice for this class of cases are *nux vomica, lycopodium, argentum nitricum, colchicum, china, rhus. tox.*, (I have been astonished at the power of *rhus.* to correct stomach troubles when otherwise indicated), *arsenicum*, and others.

But in my opinion, of greater importance than the medicinal remedy is the strict enforcement of a light, proper and simple diet. My plan is to allow the patient no solid food until the tongue becomes clear. I order either "cambric tea," as above described, or the simplest bouillon. I find the former better than any other when the patient complains of faintness and "goneness," while at the same time not hungry, and is really suffering from dyspeptic gnawing, and a gas-distended, rather than an empty stom-

ach. This hot drink dislodges the gas and allays the "gone" feeling, while it does not tax the already tired stomach to digest it. The patient will express doubt and fear that he will surely become very weak if he does not eat. He may be confidently assured, however, and the result will prove the correctness of the assurance, that he will not only not lose strength, but will gain it by adhering to this course until the tongue clears, and an appetite for plain, simple food has been acquired.

I cannot too earnestly emphasize the importance of this mode of regulating the diet in the management of this class of heart affections. It is in my opinion all-important.

A third cause of reflex heart neuroses is to be found in

DISORDERS OF THE UTERUS

and its appendages, especially the ovaries. Chief of these is unquestionably laceration of the cervix, with ulceration of the *os uteri*. It is the decision of gynecologists that through surgical measures comés the only cure for all neuroses resulting from laceration of the cervix. They are doubtless correct in their views in this.

The symptomatology of this class of cases is peculiar in one particular—the disorder gradually increases from month to month, and resists all medicinal and hygienic measures for cure. When such a history exists, no physician will have done his full duty until he has ascertained by inspection the condition of the uterus, especially if the patient has borne children. Frequently it will be found that the beginning of the trouble dates from the birth of a child. Such cases should be placed in the hands of a competent gynecologist for operation.

Congested uterus or ovaries, from any cause, most likely from excessive or disappointed sexuality, form a potent and not unfrequent cause of heart symptoms. Like the others, these cannot be cured while the cause remains operative. "*Tolle causam.*" High life, with its intemperate living and dislike for large families, is increasing this class of causes, and a proportionate increase of the results is in-

evitable. Fortunately, because the probability of a removal of their cause is very remote, this class of cases are for the present, at least, more rare than the others.

The medicinal remedies which I have found most often indicated are: *cantharis*, *cannabis*, *hyoscyamus*, *stramonium*, *secale cor.*, *pulsatilla*, *lycopodium*, *stannum*, *sulphur* and others.

DISCUSSION.—DR. SHELDON LEAVITT: I consider Dr. Hawkes' paper a very practical one. I had a case three years ago which is recalled by the essayist's remarks on tobacco. The patient, a young man æt. 24, came to me from Wisconsin in reference to what he had been told by his former physician was an organic disease of the heart. At that time he was unable to do even the lightest work. I found that for years he had been addicted to the excessive use of tobacco; rarely being without a piece of it in his mouth and chewing it—not merely holding it in his mouth.

On physical examination I was satisfied that the heart trouble was functional and not organic. This he could hardly believe, as he had been told by others the reverse. The use of tobacco was discontinued, and when I last saw him he was apparently quite well.

In regard to other causes of these affections, especially the gastric neural causes, I quite agree with the essayist. I would like to add to the list the interdiction of coffee. I had a patient a few years ago who could not take even a teaspoonful of coffee without its producing an immediate effect upon the heart. And I have observed a somewhat similar effect in many other instances.

The influence exerted by derangements of the sexual organs we will none of us deny or question.

DR. H. P. SKILES: To the mind of every one comes cases that we have seen of heart troubles that were simply functional. Especially are these cases due to reflexes from the uterus.

I have a case in mind now of a patient who had been operated on in one of our hospitals for lacerated cervix. When I saw her she was suffering constantly from spasms.

An examination showed that the operation had been only a partial success, the external portion of the incision alone having united. I reopened the wound and found a small polypus lying within the canal. When this was removed and the cervix properly restored the convulsions ceased, and they have not since returned.

Another condition having a decided influence on the heart troubles of males is phimosis. I firmly believe that this trouble is as serious in the male as the "pin-hole os" is in the female. One case in particular was that of an Omaha druggist who suffered from hæmorrhages of the stomach. He had been given up to die by a number of physicians in that city, and had been unable to take solid food for a number of months. There was nothing the matter with that man except phimosis. He was in such a state that I did not dare to give ether as an anæsthetic, and so used cocaine locally and operated. In two days he was able to take solid food, and in a month he had increased in weight from 108 to 132 pounds.

DR. S. LEAVITT: It is my impression that headaches due to stomach troubles are located in the forehead, and when from pelvic causes in the occiput.

DR. H. P. SKILES: Pelvic troubles are frequently the primary cause of gastric derangements.

DR. R. LUDLAM said that the most striking illustration of the ill effect of tobacco upon the heart that he could recall was given in Peters' work upon diseases of that organ, and that, with the consent of the Society, he would incorporate something of it in the printed report of this discussion.

At page 692 *et seq.* of his celebrated work (*Traité clinique et pratique des Maladies du Cœur et de la Crosse de l'Aorte*), after treating of the usual forms of angina pectoris, which are certainly cardiac, he speaks of a variety in which the lesion is *pulmonary*, and is referable to poisoning by tobacco (*tabagisme*). Its toxic effects are divided into acute and chronic. To illustrate its acute and extreme effects, he cites the facts concerning what has been called an epidemic

of angina pectoris that occurred on board the Ambuscade in 1858:

"Forced by the condition of the weather to remain for many days shut up in the store-room of the ship, the sailors smoked incessantly, and with a sort of mania. For variety they sometimes chewed the weed, often swallowing the juice of it. One of them who had symptoms of angina pectoris to an extreme degree, was a young cabin boy of fifteen years who had smoked his cigarette continually. On stopping the use of the tobacco, the epidemic soon passed.

"The peculiarly bad effect of the cigarette is shown in those who smoke from morning to night, in the street, the office, and even in their bedrooms. This kind of continual maceration of the respiratory organs in the smoke, the incessant dissolving of the alkaloids of the tobacco in the fluids of the mouth, the larynx and the bronchial tubes must occasion a topical irritation of the pneumogastrics. It is quite clear that in the above instance there was no proper epidemic, but that all the sailors who were confined in that narrow space and plunged in an atmosphere of tobacco, had literally 'smoked' their pulmonary pneumogastrics; and that the functional trouble which resulted through reflex action, involved the heart and its nervous supply. * * * *

"Angina pectoris may therefore result from this cause and manifest itself in an acute form which is the immediate effect of the toxic influence of tobacco upon the pneumogastric nerves. This effect may be as temporary as the application of the cause which has produced it. Sometimes it is too transient even to be recognized, but such is not always the case. Thus, with inveterate smokers, this habit may induce a chronic condition of angina with occasional exacerbations. Their cardiac and pulmonary nerves, and even the nerves of the stomach (pneumogastric and sympathetic) are always in a morbid state, or in a condition in which an illness is imminent, so that the least cause may precipitate a paroxysm of angina pectoris. It is certainly true that all smokers are not doomed to have this disorder, but experience shows that old, hardened smokers are especially prone to it, and *because they are old smokers*, or, in other words, because they have at the same time an old aorta, an old heart, and old cardiac nerves; and also that while these organs have been growing old, they have meanwhile been under the noxious influence of this peculiar poison.

"Thoracic angina is the painful expression of the tobacco poisoning; but there is a purely functional and painless form of it which consists in an abolition of sensibility, anæsthesia instead of hyperæsthesia. In this condition the mischief is with one, with two, or with all three of the departments of the pneumagastric, either simultaneously or successively. For instance, a man retires and smokes a cigar in bed; he may indulge it but a very little and then fall asleep in the air that is laden with tobacco smoke, his room being very close and heated. The first

hour of his sleep is natural, but suddenly he awakens with a start; he feels that he cannot breathe and will be suffocated; sitting up in bed he struggles severely to get his breath. But, if at that time he is examined by auscultation the air is found to enter the chest quite freely; it is only the bronchial branches of the pneumongastric that are anæsthetized, and hence the sensation which the subject experiences of not having breathed. In this case, therefore, the functional trouble involves the respiratory pneumogastric, and the victim suffers from a sort of tobacco asthma.

"Other smokers do not realize that they have eaten anything, even when they have just taken a good meal. With them it is the gastric branches of the par vagum that are anæsthetized.

"In case of paralysis of the cardiac branches of the pneumogastric the following symptoms will be present: the patient is awakened suddenly by an irregular beating of the heart; he has turbulent palpitations: his pneumogastric is temporarily paralyzed, or at least paretic; it seems as if he were going to die, and all this *without pain*. So, in lieu of neuralgic symptoms, the tobacco intoxication may provoke those of paralysis: and this may be a paralysis of local sensibility, or it may be functional, or it may involve the motility.

"I knew a Hungarian nobleman who came to Paris after having visited several of the cities of Europe in search of a cure, or of relief from his sufferings. He had been subject to repeated and irregular attacks of terrible oppression. Some of the eminent physicians whom he had consulted believed him to have had an affection of the heart; others denied it, and rightly; others thought it to be asthma, but no two agreed either in Pesth Vienna or Berlin. Upon being told what his symptoms were I asked if he did not smoke, and his wife replied that he never did so. But the man himself confessed that he did smoke the strongest cigars continually, lighting a new one from the old stump. I absolutely forbade the use of tobacco, and my orders were scrupulously obeyed for six months, when the attacks became more and more rare. About this time, however, he commenced to smoke again, but very moderately, the paroxysms returned occasionally and were not very severe. This condition continued for some time, but since that period he has died."]

THE PRESIDENT: The following question has just been handed to me: "Is the fact that a woman has a lacerated cervix any evidence that it is the cause of her present ailment?"

DR. W. J. HAWKES: If the question was inspired by what I said about the advisability of examining a woman who had borne children, I would say that it is not necessarily so but would be presumptive evidence.

Dr. H. N. Lyon: I am responsible for that question. But it was not my intention to make it public at this time. It was not occasioned by any remarks of this evening but rather the result of the day's reading. Nearly every journal that I have opened to-day reports several cases due to lacerated cervix, many of these cases showing no relation to the existing laceration.

It seems almost a fad at present to circumcise every male who has a tight foreskin, and to sew up every torn cervix uteri.

In my limited experience I have seen more than one case of even extensive laceration, or of phimosis, that was unaccompanied by the slightest disturbance to the general health.

In 1888 I operated on a young man æt. 25, for congenital phimosis on account of a constantly recurring balanitis due to the impossibility of keeping the parts clean. Although the orifice of the prepuce was only a mere pin-hole, the act of urination requiring at least ten minutes, there had never been the slightest reflex trouble excited. He had never known a sick day in his life.

Dr. Ludlam expressed the desire that those present should discuss the subject properly before the meeting. When the question of operating for a lacerated uterus, or perineum was before them it would be time enough to talk about it. Let us be careful not to carry the squinting brain that so quickly puts a topic out of focus and then forgets all about it.

Dr. W. A. Smith: In regard to Dr. Leavitt's question as to the effect of tobacco upon the heart, it is my experience that its primary action is not upon the heart but upon the stomach, and that its use must be discontinued before a cure can be expected.

Dr. Leavitt: I am not sure that this is always the case.

Dr. Smith: In my own experience tobacco causes dyspepsia.

Dr. W. J. Hawkes: In closing the discussion Dr.

Hawkes said: It is my experience that a very strong cigar will give me a pain about the heart before it will affect the stomach. I think, however, that tobacco affects the weaker organ first. If a person has a perfectly strong heart and an irritable stomach, the stomach will be the first affected, and *vice versa*.

SPIGELIA IN HEART-FAILURE. By ALFRED HEATH, M. D., LONDON, ENGLAND.— *Case 1.*— Mr. S., a justice of the peace, aged about 70, who was recovering from a secondary congestion of the left lung, caused partly by weakness of heart, and which I had been treating for some weeks, was suddenly taken with most alarming symptoms. I was telegraphed for, but did not get to him for an hour, as I had eight or ten miles to go. I found him apparently dying, with his friends standing around his bed, and he was praying to God to have mercy on him. *There was irregular action of the heart and a sense of suffocation, aggravated by lying down; wanted to be propped up; respiration quick and labored; icy coldness of the whole body, with cold, clammy perspiration.* I immediately ordered flannels, wrung out of hot water, to be placed over the region of his heart, constantly renewing them, more by inspiration than from any well-defined selection. I gave him Spigelia third decimal. This drug gives the irregular action of the heart, feeling of suffocation and aggravation on lying down. There was no time for more. Soon after taking the medicine the breathing became quieter and he ceased praying, and began to take more notice, but did not speak—motioned for any thing he required. During the first alarming symptoms, which lasted about half an hour, I gave the medicine every few minutes; presently he begged to be taken out of bed and placed in a chair. He was well wrapped up and put into a large easy chair (Hahnemann's own easy chair which he had once bought), where he remained, and I sat by him all night. His legs became enormously distended with water. I continued treating him, with slow improvement, for about six weeks. He was able to transact some business (was a large ship owner), and to take interest in things that were talked of and read to him. At the end of that time he was able (certainly against my express wish) to travel 200 miles to his home, which he did without apparent injury. I ceased treating him when he left London. In about six weeks after going home he died.

Case 2.—The second case was Mrs. W., aged about 30, who had had three children. I had been treating her for and she was just recovered from rheumatic fever after an illness of ten days. She was a slight, delicate woman, with a weak heart, but no valvular disease. She was suddenly taken the evening of the first day after getting up. I found her *icy* cold from head to foot, with her hand over her heart, scarcely able to articulate "Oh, dear! Oh, dear!" with extreme prostration, fearing the worst, as she was evidently dying. I gave her ammon. carb., but with no relief; I then gave her spigelia, 3 dec. She was very quickly relieved and began to talk a little. I was able to relieve her in had another child, and is now better and stronger than about an hour, and she made a good recovery, has since she ever was.

VOLUNTEER PAPER.—EXTIRPATION *VERSUS* ELECTRICITY IN NON-HEMORRHAGIC, EXTRA-UTERINE FIBROMATA. (ILLUSTRATED). BY DR. R. LUDLAM.—In presenting some specimens of extra-uterine fibroids to the society Dr. Ludlam said: So much has been claimed for electricity in the treatment of these tumors that it is about time to hear from counsel on the other side. And I do not know a more appropriate occasion than the meeting of this society for presenting a brief clinical argument against the indiscriminate employment of Apostoli's method in these cases, or at least against the current habit of promising to *remove* them and to *cure* them by this means alone.

I know that the more careful and conscientious practitioners who use this agent, and who think so much of it as a conservative method of treatment, are beginning to draw the line which limits its application to suitable cases. And this is a great gain, for the value of any resource depends upon our knowing just when and how to apply it, and when as well as why we sometimes withhold its use. There was a time when it was claimed that ovarian cysts could be disposed of and cured by electricity, or even by internal medication, but that time is fast passing away. So too with those fibroids which lie outside of the uterine wall, and which are non-hemorrhagic, and large enough and so located and attached as seriously to impair the patient's health; the claim that they are really and radically curable by electricity is not worth as much now as it was two years ago. What we all want to know is which of these varieties of uterine tumors, if any of them, are curable by electricity and which of them need the knife.

Of the three hysterectomies that I have made within ten days past all of them have been for the removal of myomata that certainly could not have been cured by electricity in any form. This specimen (Fig. 3) was taken

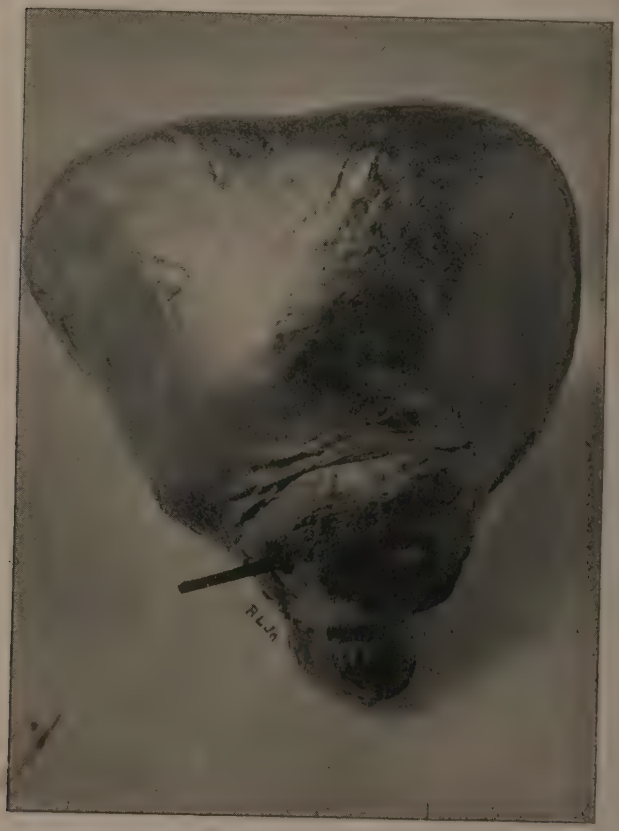

FIG. 3. EXTRA-UTERINE FIBROID.

from a patient of Dr. J. S. Maxon, of Walworth, Wis. The probe shows the direction of the uterine canal. As you perceive by the section thereof, the principal growth is a dense, door-knob fibroid with a very thick and firm

capsule (Fig. 4). Its intimate attachment to the fundus and body of a half-developed uterus made it impossible to remove the growth with safety to the patient except by a supra-vaginal hysterectomy. Another small fibroid was

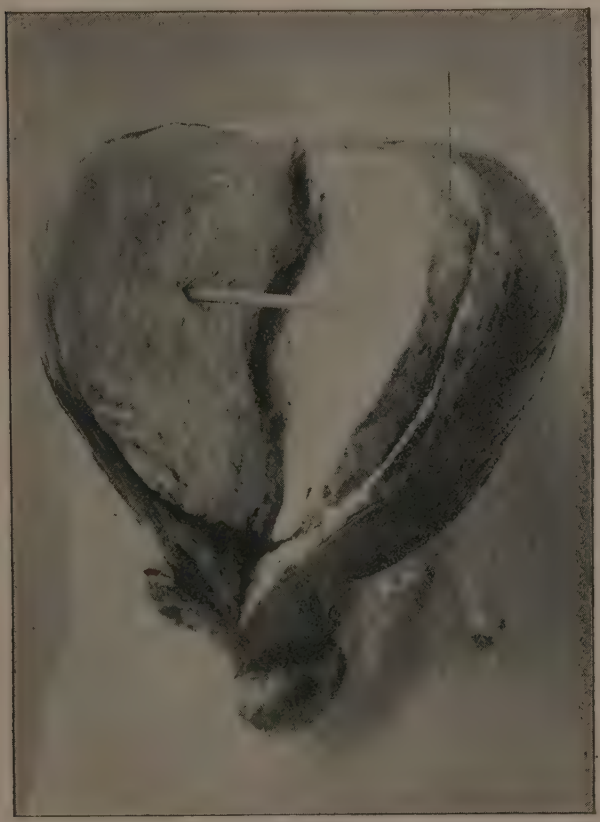

FIG. 4. SECTION OF THE SAME.

attached to the body of the womb lower down. The peculiarity of the case was that the woman's menstrual flow had always been scanty and that, of late, although she was only thirty-two and in pretty good general health, it had

almost entirely disappeared. She is now rapidly getting well without any symptoms that are due to the operation.

Case 2 was of a similar kind. The patient was sent to me for the relief of an atrocious dysmenorrhœa of a dozen years duration, by Dr. C. S. Penfield, of Spokane Falls, Washington. She had had a deal of treatment by other physicians and specialists in Portland and San Francisco, but without benefit. She had never had menorrhagia and had never conceived. Her life was a burden and she had come hither as a last resort. Abdominal section revealed two extra-uterine fibroids as big as large potatoes

Fig. 5. Fibroids, uterus, ovaries and tubes.

and a number of smaller ones scattered over the uterus beneath its peritoneal investment. The right ovary was badly diseased. (Fig. 5). There was no recourse but a supra-vaginal hysterectomy. The operation was made in St. Mary's hospital, Milwaukee, where, under the skillful after-treatment of Dr. O. W. Carlson, she too is fast recovering.

Case 3 was sent to my clinic by our friend, Dr. E. F. Storke, of Milwaukee, Wis. This specimen (Fig. 6) shows that the patient had a brace of tumors, one of which was located in front and to the right of the mesian line. It was

freely movable, as big as my fist, and almost as hard as a board. The other growth was attached to the left and posterior part of the uterine fundus and body, and filled the lower pelvis almost as completely as a child's head at term would have done. This tumor was but slightly movable and could not be lifted above the superior strait, and, although it was hard to the touch, gave one the impression of being somewhat œdematous. Dr. Carlson, who

FIG. 6. SOLID AND CYSTIC FIBROIDS, UTERUS AND TUBES.

had seen the case in consultation before she entered the hospital, had pronounced this retro-uterine tumor cystic, probably ovarian. During the operation it was impossible to lift it out of its bed because of adhesions all over its lower and posterior surface.

On seizing it with a strong volsellum the contained fluid began to escape through the punctures made by the teeth

of the instrument, and we found that we really had to do with a thick-walled cyst, and not with a solid tumor like its fellow. This growth was carefully examined afterward, and it proved to be one of those rare cases in which all that portion of the tumor contained within its capsule had undergone cystic degeneration, so that its cavity was filled with broken down and disorganized fibrous tissue and a bloody, dirty serum.

This sac was evidently an interstitial outgrowth from the uterus and could not be separated from it, for which reason the fundus and body of the organ, as well as both ovaries and tubes, were taken away with it. As you will observe, the cyst-wall is plainly made of the old fibrous capsule, which had no connection either with the ovaries or with the broad ligaments. The patient thinks that she has had this posterior growth since soon after her marriage, now thirteen years ago. She has never had any menorrhagia, nor has she ever conceived. Desperate as her case was, she is thus far doing very well since the operation.*

A recent writer, in speaking of the surgical treatment of uterine fibroids says: "More than thirty per cent. of the cases that are coming to me for supra-vaginal hysterectomy are cases that have been treated with electricity." (Dr. Jos. Price). If I may judge from my own experience at least half the cases of uterine fibroids are sub-peritoneal, and almost all of them are multiple. Where they have a pedicle, and sometimes where they have none, they are of the non-bleeding sort, and galvanism as a hæmostatic is not called for.

Battey's operation, which was practiced to stop the flow by precipitating the menopause, saved the strength and gave symptomatic relief, but it left the tumor behind. Even Keith, who a few months ago was more enthusiastic than Apostoli himself as to the possibility of curing and removing these growths by electricity, is again making his

*November 15.—Three weeks have passed since this report was presented. The two former cases are well again, but the third which despite its serious complications, did so well at first, developed a condition of the stomach which would tolerate nothing and which could not be overcome. The wound having healed very kindly and promptly except at the pedicle, which was clean and sweet, and just ready to drop off, her death on the fourteenth day was ascribable to no other cause.

hysterectomics in suitable cases; and I think we are likely to learn just where the line should be drawn between the proper and established surgical resources and this newer means, which is being so indiscriminately used with varying degrees of failure.

If we could be certain that these fibroids would disappear, or would cease to grow and to trouble our patients after the menopause, we might patch them up and wait for that change to come. But there is no evidence that an extra-uterine fibroid with or without a pronouuced pedicle is likely to disappear in consequence of the climacteric. Indeed the clinical evidence is greatly in favor of their increased liability to grow and to undergo some form of mischevous degeneration after that period.

Nor can we always decide which of them are benign and which are malignant, recurrent, or sarcomatous, until at least an exploratory incision has been made. So that, if the tumor is of the sub-peritoneal variety, has grown rapidly, and is accompanied by a great deal of suffering and by marked constitutional involvement, I think it is our manifest duty to do something more than merely to palliate and to postpone the evil day.

Clinical Reviews.

EPILEPSY: ITS PATHOLOGY AND TREATMENT. By HOBART AMORY HARE, M. D., (Univ. Penn.) B. Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania, etc., etc. F. A Davis, publisher; pp. 228; $1.25.

This is a prize essay, as we are informed on the title page, and the prize was awarded by the Académie Royale de Médecine de Belgique, and was four thousand francs. In the preface the author again informs us, that it "was considered by the Royal Academy of Medicine in Belgium as worthy of a prize of four thousand francs, and this must be the chief excuse for its publication," etc. This is a charmingly frank statement of the *raison d'être* of the work. In the next paragraph we have a hint of the author's opinion of the medical profession, or at least such part of it as has written upon the subject of epilepsy. He says he "has endeavored to separate the good material in literature from a vast mass of superstition and nonsense, which persons even in our own generation have contributed." He must entertain a very low opinion of the intelligence of those medical men who have written on this subject and a very high one of his own. "A vast mass of superstition and nonsense" are very uncomplimentary, not to say severe terms, to apply to the writings of a school of medicine which is so constantly boasting of its exact scientific qualifications.

The following is the definition of epilepsy as given on page 1:

"Epilepsy is to be defined as a disorder of the nervous system characterized by sudden convulsive seizures of temporary duration, the muscles of the part affected being first in tonic spasm, then alternately contracted and relaxed (clonic spasm), the attacks generally occurring at irregular intervals, and being always accompanied by loss of consciousness, more or less complete, in the typical disease. The movements also have no relation with those of ordinary life. In rare instances, however, one or more of these symptoms may be absent, and yet the disease be epilepsy."

This definition is a fair description of a typical epileptic fit of the major variety, but it does not make clear an attack of petit mal. As "the relative frequency of *petit mal* to *haut mal* has been placed by well-informed writers as 1 to 2," it would be better to have a definition that would make the epileptic nature of *petit mal* distinct. The qualification of the definition, "in rare instances, however, one or more of these symptoms may be absent, and yet the disease be epilepsy," does not make the matter clear. The cases of epileptiform phenomena that accompany other diseased conditions, and which are secondary to such disease, might under this definition be classified as epilepsy, and in this respect the definition tends rather to obscure than to make clear the diagnosis.

The author discusses the individual syptoms of the disease at length, and has brought out the facts for the most part in a clear manner. In some instances he has emphasized the importance of certain conditions which have not received from the general profession the consideration they demand; this is true of night terrors which occur more frequently with children. That in some instances they may be epileptic in nature, either as a fully developed epilepsy or as a neurotic condition which may lead to it, is altogether probable. In no instance ought a physician to pass them over as a nightmare from indigestion, or the temporary result of a fright, without a thorough investigation to see if they do not have an epileptic basis.

The cortical origin of this disease is advocated, with a practical rejection of all other hypotheses.

In the treatment there is given a very good summary of the allopathic medication, and the hygienic measures advisable. The operative procedures for the relief of epilepsy are also discussed at some length. H. B. F.

Hospital Notes.

THE CLINIC ON NERVOUS DISEASES.—This clinic maintains its old interest and its place in the esteem of the senior students especially. Besides the lecture which is given in this issue on Pseudo-hypertrophic Paralysis, Prof. Fellows has already demonstrated the interesting points of study in three cases of Locomotor ataxia; in a full assortment of Epileptics, in Sciatica, Neurasthenia, Chorea and Hysteria.

THE SURGICAL CLINIC.—This clinic has been full and practical as usual. Operations have been made by Prof. Shears before the class for Necrosis of the skull, with recovery; Necrosis of the malar bone, involving the nasal and superior maxillary bones causing exophthalmos; Mammary amputations; a number of Rectal cases; several large lipomata; and for the removal of diseased testicles. There have also been two very interesting cases of Fracture of the condyles of the humerus; and one case of Floating Kidney, in which that organ was brought into position and secured by appropriate sutures, (*nephrorrhaphy.*)

THE CLINIC FOR THE MEDICAL DISEASES OF WOMEN.—The variety of cases shown in this clinic is as great as ever before, and the senior students seem to be enjoying it very thoroughly. In the general Friday's clinic Prof. Bailey has taken the greatest pains to demonstrate the practical side of his subject. Among the most remarkable of his lectures thus far given have been those upon peculiar forms of Amenorrhœa, Supra-involution of the uterus, and the medical application of Galvanism to the diseases of women. The sub-clinic in this department is held at the same time and in the same way that has been so long in vogue in this hospital.

THE CLINIC FOR THE SURGICAL DISEASES OF WOMEN.—During the seven weeks since the winter term opened Prof. Ludlam has made seven laparotomies before the class. One of these was a supra-vaginal hysterectomy, another was for the removal of a forty-pound cyst of the ovary, and a very bad one; a third was for the removal of a compound cyst of the ovary weighing eighteen pounds; three were for the removal of the uterine appendages, and the remaining one was for the radical cure of a ventral hernia. All of these, excepting the case of hysterectomy, the particulars of which are given at pages 546–7 of this issue, have recovered.

Beside these cases, there have been a number of perineorrhaphies, colpo-perineorrhaphies, trachelorrhaphies and the more ordinary plastic operations proper to this clinic.

A SPECIAL COURSE OF LECTURES ON RECTAL SURGERY.—Prof. Hall began a special course of seven weekly lectures on this subject, October 22nd. His topics embrace a general Introductory—Rules for Examinations and Instruments Employed—Irritable Sphincters, Congenital Malformations, etc.—Abscess, Sinus and Fistulæ in the Rectum—Proctitis, and Periproctitis and Ulcers—Hemorrhoids and Prolapsus of the Rectum—Stricture of the Rectum, Malignant and Non-malignant Growths.

This course, which is progressing very happily, is very popular and practical.

THE SPECIAL COURSE OF LECTURES ON SKIN AND VENEREAL DISEASES now being given by Prof. Hoyne on Monday evenings fills the amphitheatre to its utmost. This special course, like all the others, is open and free to all the students of the old college. *Lecture card, supplement No. 3*, gives the bill of fare as follows: Introductory to the course; Primary Syphilis; Secondary ditto; Tertiary ditto; Hereditary ditto; Gonorrhœa and Gleet; General Classification of Skin Diseases; the Vesicular Diseases of the Skin; the Pustular diseases of ditto; the Parisitic diseases.

THE SPECIAL COURSES ON OPERATIVE MIDWIFERY AND ON MINOR GYNECOLOGICAL SURGERY.—The great number of general clinics and of sub-clinics that are being given in this institution during the present winter has so taken up the students' attention during the day-time that some of the more important didactic lectures have to be given in the late afternoon and evening. Among these extra appointments, beside those already noticed, is a series of seven lectures by Prof. Leavitt on the use of the Obstetric Forceps, and as many more by Prof. Ludlam on all sorts of little things connected with Gynecological Surgery.

A LEAF FROM THE FINANCIAL HISTORY OF THE HAHNEMANN MEDICAL COLLEGE AND HOSPITAL, OF CHICAGO.—At the last meeting of our Board of Trustees Dr. T. S. Hoyne, Treasurer of this Institution, presented a report from which we extract a few items. Dating from the year 1870, when the present college was built, to 1876, when only four members were left in its Faculty, and from that time forward by periods of six years, the figures show a remarkable increase in its growth and popularity. They are as follows:

Average annual cash receipts, '70 to '76.....	$5,684.33
" " " expenses, " " " "	5,397.95
Average annual cash receipts, '76 to '82.....	9,893.50
" " " expenses, " " " "	8,759.65
Average annual cash receipts, '82 to '88.....	13,144.33
" " " expenses, " " " "	9,108.22

This great comparative gain, without any increase in the slender fees for tuition, and which has continued in the same ratio since 1888, shows with what fidelity its Board of Trustees and its band of teachers, who get no pay for their work, have labored to build up this honored institution. Since the year 1876 they have not only paid off a mortgage of $25,750, part of which drew ten per cent. and the other part eight per cent. per annum, and all the running expenses of the college and hospital meanwhile, but they have also expended over $21,000 in building and repairing the hospital amphitheatre. All of this has been

accomplished without any of the large bequests or subscriptions that have rained upon some of our eastern neighbors, the like of which, we hope, are in store for us.

Dr. Hoyne's balance-sheet for the last fourteen years, ending March 1, 1890, shows the total income of the college and hospital to have been $241,195.15, and the total outgo to have reached the sum of $217,018.72, leaving a balance of over $24,000 now in the bank, with the present hospital and college grounds and buildings *entirely paid for*. This, with his final remark, that "to-day the old corporation does not owe a hundred dollars," is certainly a good and encouraging exhibit to its alumni and friends everywhere.

Miscellaneous Items.

We are pained to record the death of our colleague, Prof. W. S. Gee, from phithisis pulmonalis, on the morning of November 11. A detailed notice of his life and character will appear in our next issue.——Dr. Margaret E. Thorpe, '85 has removed from New Haven, Ct., to Bay Shore, N. Y.——Dr. Alice M. Goss, '89, is at 205 Powell St., San Francisco.——Somebody says that the so-called "Orificial philosophy" is philosophy with a hole in it.——Attention is called to our advertising pages as indicating an excellent Winter Resort for invalids, which is not 1000 miles away, in the commodious Pennoyer Sanitarium at Kenosha, Wis.——Dr. James G. Ames, aged 28, died of typhoid fever October 23rd at Bucyrus Ohio.——A splendidly illustrated special course is being given in the college amphitheatre on Histology, and Physiological Anatomy by Profs. Lyon, Halbert and Cobb. ——One more No. closes Vol. XI of the CLINIQUE.—— Dr. W. L. Draper, '90 has located at Wilson, N. Y.—— Dr. Clara W. Peaslee, a much-respected alumnus, died Octocer 28th, at Grace Hospital, Detroit.——Dr. J. E. Sawyer, of St. Paul, has removed his office to the Germania Life Insurance building.——Dr. Leavitt, Chairman of the Bureau of Obstetrics, will present the report at the next meeting of the Clinical Society, Saturday evening, Nov. 29.——Our December issue will contain a lecture on heart-failure by Prof. Arnulphy.——The Hahnemann Publishing House, Philadelphia, has remembered us with a copy each of Farrington's Clinical Materia Medica, second edition, and of Gentry's Rubrical and Regional text-book on the Urine and Urinary Organs, both of which will be reviewed in due time.